

CLASSIFIED MESSAGE

**SECRET**

(When Filled In)

FILE INFO

REPRODUCTION PROHIBITED

|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|--------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| ACTION | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |

UNCLASSIFIED 292021Z JAN 69 CITE

IDEALIST

SUBJ: TURBULENCE CAUSING ABORT OF ART 055

1. HERewith IS A REVIEW, AS REQUESTED, OF THE TURBULENCE ENCOUNTERED ON 22 JAN 69 RESULTING IN AN ABORTED FLIGHT IN ART 055.

2. THE WEATHER BRIEFING FOR THIS FLIGHT FORECAST MODERATE TURBULENCE 0 - 45N AND 65 - 85N. THE MAJOR TURBULENCE WAS EXPECTED TO THE WEST AND NORTH OF EAPB, PARTICULARLY OVER THE SIERRAS. THIS WAS TO BE A GYST 20 BACKGROUND TEST AT PLUS 20K.

3. TAKEOFF WAS AT 1200L WITH A SURFACE WIND OF 230/20 @ 25. AFTER TAKEOFF THE GUST CONTROL WAS SELECTED UP AND THE CLIMBOUT MADE TO THE EAST TO DAGGET VORTAC. LIGHT TURBULENCE WAS ENCOUNTERED AT 30-32M. AT 47M THE GUST CONTROL WAS SHIFTED BACK TO FAIRED.

4. 20NM EAST OF DAGGET AT AN ALTITUDE OF 51M AND WITH THE AUTOPILOT ENGAGED, SEVERE TURBULENCE WAS VERY SUDDENLY ENCOUNTERED. THE KIAS WAS 135 AND HAD DELIBERATELY BEEN KEPT LOW IN CASE OF TURBULENCE. THE AUTOPILOT (NO MACH HOLD) WAS LEFT ENGAGED FOR SOME SECONDS TO SEE HOW IT BEHAVED, BUT IT WAS OBVIOUS THAT THINGS WERE GETTING OUT OF HAND SO IT WAS DISENGAGED. THE AIRCRAFT WAS

*BEST COPY*

*AVAILABLE*

**SECRET**

(When Filled In)

FILE INFO

REPRODUCTION PROHIBITED

|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|--------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| ACTION | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |

25X1 PAGE 2

**SECRET**

MANDELOWN UP TO 55M WITH NO LESSENING OF THE TURBULENCE. DURING THIS PERIOD NEGATIVE G WAS ENCOUNTERED SUFFICIENT TO ACTIVATE THE

AND CONTROL OF THE AIRCRAFT WAS CONSIDERED TO BE MARGINAL DUE TO EXCESSIVE YAWING AND PITCHING MOTIONS. THE AIRSPEED WAS FLUCTUATING PLUS OR MINUS 10 KNOTS. AT THIS POINT IT WAS DECIDED TO DISCONTINUE THE CLIMB. IT IS DIFFICULT TO PORTRAY THE EFFECT OF HIGH ALTITUDE TURBULENCE ON THIS AIRCRAFT, BUT THIS PILOT ATTEMPTS TO EXPRESS IT IN TERMS OF THE DEGREE OF CONTROL HE HAS. IN THIS CASE IT WAS ASSESSED AS 40 PERCENT CONTROL. IN ONLY ONE OTHER CASE HAS THIS PILOT HAD LESS CONTROL. IN TURBULENCE AND THAT WAS FIVE YEARS AGO IN A "C" MODEL. AT THAT TIME THE TURBULENCE WAS ASSESSED AS EXTREME, CONTROL AS ABOUT 30 PERCENT AT AN ALTITUDE OF 52 TO 53M. THE AIRSPEED WAS FLUCTUATING PLUS OR MINUS 15 KNOTS.

C. FOUR FACTORS INFLUENCED THE PILOT IN THE DECISION TO ABORT.

A. THE TURBULENCE WAS ENCOUNTERED IN AN AREA WHICH IS NORMALLY VIRTUALLY FREE OF ANY, EXCEPT LIGHT TURBULENCE.

B. THE FORECAST INDICATED THAT MATTERS WOULD GET WORSE.

C. NEGATIVE G IS SOMETHING THAT THIS AIRCRAFT IS NOT AMENABLE TO.

CLASSIFIED MESSAGE

**SECRET**

(When Filled In)

FILE INFO

REPRODUCTION PROHIBITED

|        |   |                   |    |            |    |  |    |
|--------|---|-------------------|----|------------|----|--|----|
| ACTION | 1 | <i>[initials]</i> | 6  |            | 11 |  | 16 |
|        | 2 |                   | 7  |            | 12 |  | 17 |
|        | 3 |                   | 8  |            | 13 |  | 18 |
|        | 4 |                   | 9  |            | 14 |  | 19 |
|        | 5 |                   | 10 | <i>BSA</i> | 15 |  | 20 |

25X1 PAGE 3   8800 SECRET

D. THIS PILOT LIKES A LITTLE MORE THAN 50 PERCENT CONTROL  
OF THE AIRCRAFT.

7. A THOROUGH POST FLIGHT INSPECTION OF THE AIRCRAFT WAS MADE  
AND NO DAMAGE TO THE AIRFRAME WAS NOTED.

SECRET

BY